

# GRAS AL0030

Production Line Acoustic Test Chambers



Self Insertion Loss: >25 dB  
CCP Microphone set

GRAS AL0030-1, GRAS AL0030-2 and GRAS AL0030-3  
are acoustical test chambers for production line testing  
of mobile devices such as cell phones, tablets,

Bluetooth® speakers, etc.

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## Introduction

The GRAS AL0030-x Production Line Acoustic Test Chambers are an anechoic test chambers for acoustic production line testing of mobile devices, for example cell phones, tablets, bluetooth speaker systems and similarly sized portable acoustic devices. It provides a flexible platform that can be configured to suit specific requirements.

## Design

It is built from medium density fiber board lined with acoustic damping material. A large opening at the back of the chamber allows easy access to the chamber for configuring the test setup. The chamber has shock and vibration absorbing feet that prevent vibration from the outside from influencing the measurements.

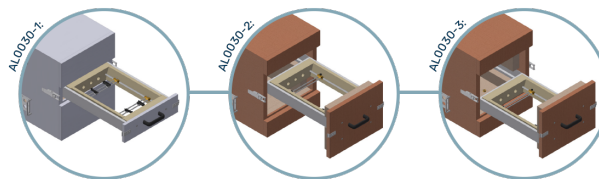
It has a drawer with multi-adjustable holders for easy and safe mounting and removal of the device under test (DUT). It can hold small and medium sized portable devices up to (WxDxH) 300 x 200 x 228 mm (12" x 8" x 9").

The test chamber has four fixing points for microphones and sound source, two at the top and two at the bottom panel. Holders for a total of four microphones and/or sound sources can be mounted at these fixing points. Additionally, a microphone can be attached to the drawer.

A connector panel that can be configured with 8 or 10 (depending on drawer size) user-specified connectors provides interface to external instruments. You find more information in the ["Brochure"](#), also available in the "Resources".

## A Flexible and Configurable Test Platform

AL0030 provides a flexible test platform that can be configured to suit specific needs.



The basic configuration starts with selecting the chamber between the 3 versions:

- AL0030-1 with a small drawer for maximum DUT dimensions (WxDxH) 30 x 20 x 6,6 cm
- AL0030-2 with large drawer with fixture in upper part of the test space and maximum DUT dimensions (WxDxH) 30 x 20 x 22,8 cm
- AL0030-3 with large drawer with fixture in lower part of the test space and maximum DUT dimensions (WxDxH) 30 x 20 x 22,8 cm

All versions include user selectable accessories for immediate acoustic testing.

As standard the AL0030 comes with a basic suite of accessories needed for audio response testing. The following are included:

- The Acoustic Test Chamber
- Choice of one microphone set
- Choice of a set of DUT holders
- Choice of one microphone holder
- One connector panel drawer: select between standard or large
- One cable for the microphone set

Additionally, the test chamber can be fitted with a sound source and artificial ear.

The connector plate can also be ordered blind for your own adaptation.

Included and optional accessories for AL0030 are listed under the tab Ordering info.

You can find more information in the downloadable [Brochure](#), available as well under "Resources".

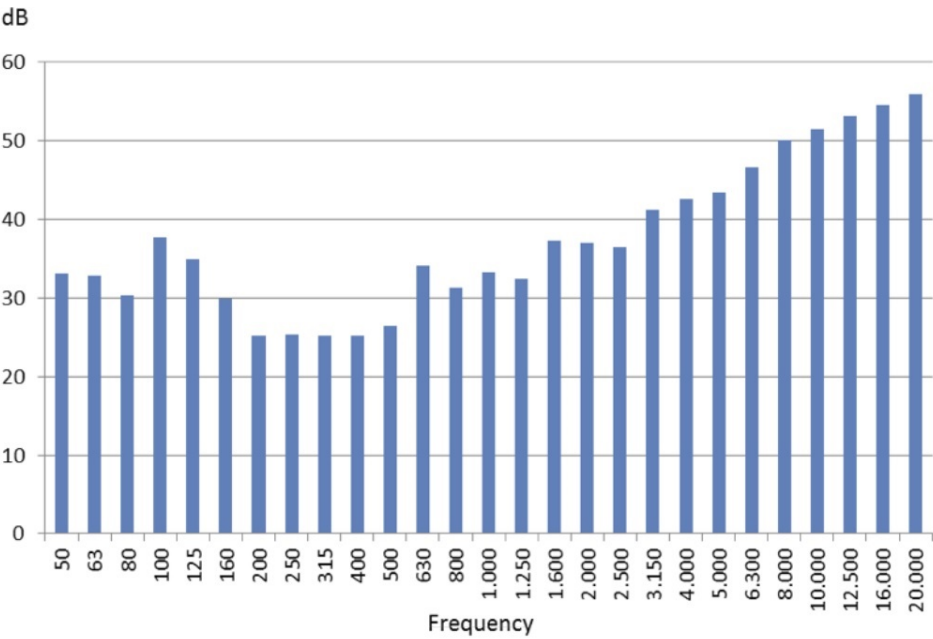
The configuration of a test box is done together with your GRAS sales representative.

If you should have needs that are not covered by these options we are open to customize it to suit your specific needs. Contact (your local) GRAS (representative) to initiate a customization process.

## **Quality and warranty**

The Acoustic Test Chamber is covered by a two year warranty. For cables and accessories, the warranty for the specific item is valid.

|                |        |       |
|----------------|--------|-------|
| Connector type |        | BNC   |
| Weight         | g / oz | 39 kg |



Self Insertion Loss measured in reverberant conditions

GRAS Sound & Vibration reserves the right to change specifications and accessories without notice.

## Test chamber versions

|               |   |
|---------------|---|
| GRAS AL0030-1 | Acoustic Test Chamber, small drawer                 |
| GRAS AL0030-2 | Acoustic Test Chamber, large drawer w high mounting |
| GRAS AL0030-3 | Acoustic Test Chamber, large drawer w low mounting  |

## Included items

|             |                         |
|-------------|-------------------------|
| GRAS AA0079 | Microdot-BNC cable, 1 m |
|-------------|-------------------------|

## Included Items - user selections

### Reference Microphone

|                           |   |
|---------------------------|---|
| <a href="#">GRAS 46BL</a> | 1/4" CCP Pressure Standard Microphone Set, High Sensitivity |
| <a href="#">GRAS 46BD</a> | 1/4" CCP Pressure Standard Microphone Set                   |
| <a href="#">GRAS 46BE</a> | 1/4" CCP Free-field Standard Microphone Set                 |

### Microphone Holder

|             |  |
|-------------|--|
| GRAS OP0040 | Microphone Holder for top/bottom mounting    |
| GRAS OP0041 | Microphone Holder for mounting in the drawer |

### DUT holders—one set of 4

|             |                                  |
|-------------|----------------------------------|
| GRAS OP0030 | DUT Holder, low placement, small |
| GRAS OP0031 | DUT Holder, low placement, large |
| GRAS OP0032 | DUT Holder, top placement        |

## Connector Panel

|                |  |
|----------------|--|
| GRAS OP0050    | Connector panel for AL0030—Standard drawer with space for 8 selectable connectors  |
| GRAS OP0050-S2 | Connector panel for AL0030-S2—Large drawer with space for 10 selectable connectors |

## Selectable Connector-panel Connector Options

|        |  |
|--------|--|
| AE2197 | BNC Socket, Female                         |
| AE2198 | RCA Socket, Female                         |
| AE2199 | XLR Connector 3 pol, Female                |
| AE2200 | Loudspeaker connector plug, SpeakON, 4 way |
| AE2201 | S-VHS, Female, to S-VHS, Female            |
| AE2202 | ¼" jack, 3 pol                             |
| AE2203 | D-sub 9 pin                                |
| AE2204 | HDMI-Connector                             |
| AE2205 | Ethernet connector                         |
| AE2207 | USB-B adapter                              |

NOTE: Please contact [support@GRASacoustics.com](mailto:support@GRASacoustics.com) for help configuring the Production Line Acoustic Test Chamber.

## Optional Items - not included

### Sound Source

|                           |   |
|---------------------------|---|
| <a href="#">GRAS 44AA</a> | Mouth Simulator according to ITU-T Rec. P51 with built-in power amplifier |
| <a href="#">GRAS 44AB</a> | Mouth Simulator according to ITU-T Rec. P51                               |

## Sound Source Holder

|             |  |
|-------------|--|
| GRAS OP0045 | Sound Source Holder with swivel head                     |
| GRAS OP0046 | Sound Source Holder with swivel head, heavy duty version |

## Ear Simulator

|                           |   |
|---------------------------|---|
| <a href="#">GRAS 43AH</a> | CCP Ear Simulator for Production Testing Based on ITU-T Rec. P57 Type 3.2 Low-leak  |
| <a href="#">GRAS 43AI</a> | CCP Ear Simulator for Production Testing Based on ITU-T Rec. P57 Type 3.2 High-leak |

## Cables

|                             |                         |
|-----------------------------|-------------------------|
| GRAS AA0032                 | BNC-BNC Cable, 0.5 m    |
| GRAS AA0033                 | BNC-BNC Cable, 1 m      |
| GRAS AA0034                 | BNC-BNC Cable, 2 m      |
| <a href="#">GRAS AA0035</a> | BNC-BNC Cable, 3 m      |
| <a href="#">GRAS AA0070</a> | Microdot-BNC cable, 3 m |

## Miscellaneous

|                                       |  |
|---------------------------------------|--|
| GRAS OP0061                           | Set of 2 drawer latches                                  |
| <a href="#">GRAS 12BA, -BE or -BB</a> | 1-, 2- or -4-Channel CCP Power Modules with TEDS Support |
| <a href="#">GRAS 12AL</a>             | 1-Channel CCP Power Module with A-weighting filter       |
| <a href="#">GRAS 12AX</a>             | 4-Channel CCP Power Module with Gain                     |
| <a href="#">GRAS 42AP</a>             | Intelligent Pistonphone, Class 0                         |
| <a href="#">GRAS 42AG</a>             | Multifunction Sound Calibrator, Class 1                  |

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# GRAS Worldwide

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than 40 countries

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## About GRAS Sound & Vibration

GRAS is a worldwide leader in the sound and vibration industry. We develop and manufacture state-of-the-art measurement microphones and related equipment for industries where acoustic measuring accuracy and repeatability are of the utmost importance. This includes applications and solutions for customers within the fields of aerospace, automotive, audiology, consumer electronics and other highly demanding industries. GRAS microphones are designed to live up to the high quality, durability and accuracy that our customers have come to expect, trust and require.

GRAS Sound & Vibration is represented through subsidiaries and distributors in more than 40 countries and is part of Axiometrix Solutions, a leading test solutions provider comprised of globally recognized measurement brands. Read more at [www.grasacoustics.com](http://www.grasacoustics.com)

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